OFFICE OF CONTRACT ADMINISTRATION

PROJECT ADMINISTRATION DATA SHEET

[x] ORIGINAL [ ] REVISION NO. _____

Project No. E-23-604 GTRI/~~GTX~~ DATE 8/4/83

Project Director: Dr. D. G. Berghaus School/~~Lab~~ ESM

Sponsor: E. I. DuPont De Nemours & Company, Savannah River Plant

Type Agreement: P.O. No. AX0617537 (under DE-AC09-76SR00001)

Award Period: From 6/15/83 To ~~6/15/84~~ 6-30-85 (Performance) 6/15/84 (Reports)

Sponsor Amount:	This Change	Total to Date
Estimated:	$	$ 27,600
Funded:	$	$ 27,600

Cost Sharing Amount: $ _____ Cost Sharing No: _____

Title: Strain and Deformation during Extrusion of Powder Metals

ADMINISTRATIVE DATA

OCA Contact Faith G. Costello Ext. 4820

1) Sponsor Technical Contact:

H. B. Peacock
E. I. DuPont De Nemours & Co.
Savannah River Plant
Aiken, South Carolina 29808-0001
(803)-725-6211

2) Sponsor Admin/Contractual Matters:

Bennie L. Godwin
E. I. DuPont De Nemours
Savannah River Plant
Aiken, South Carolina 29808-0001
(803)-725-6211

Defense Priority Rating: NA Military Security Classification: _____

(or) Company/Industrial Proprietary: _____

RESTRICTIONS

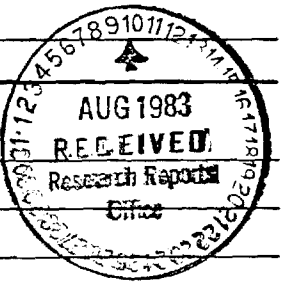
See Attached _____ Supplemental Information Sheet for Additional Requirements.

Travel: Foreign travel must have prior approval – Contact OCA in each case. Domestic travel requires sponsor approval where total will exceed greater of $500 or 125% of approved proposal budget category.

Equipment: Title vests with Government

COMMENTS:

Allocation of Funds as shown: 7/83 to 9/83 - $ 3,712
10/83 to 6/84 - $23,888



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FORM OCA 4:383

GEORGIA INSTITUTE OF TECHNOLOGY OFFICE OF CONTRACT ADMINISTRATION

SPONSORED PROJECT TERMINATION/CLOSEOUT SHEET

Date 3/31/86

Project No. E-23-604 School/~~XXX~~ ESM

Includes Subproject No.(s) N/A

Project Director(s) Dr. D.G. Berghaus GTRI / ~~GIT~~

Sponsor E.I. DuPont De Nemours & Company, Savannah River Plant

Title Strain and Deformation during Extrusion of Powder Metals

Effective Completion Date: 6/30/85 (Performance) 6/30/85* (Reports)

Grant/Contract Closeout Actions Remaining: * See memo dated 1/24/86 from Dr. Berghaus.

- [ ] None
- [X] Final Invoice or Final Fiscal Report
- [ ] Closing Documents
- [ ] Final Report of Inventions
- [ ] Govt. Property Inventory & Related Certificate
- [ ] Classified Material Certificate
- [ ] Other

Continues Project No. Continued by Project No. E-23-612

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Form OCA 60:1028

QUARTERLY REPORT

PROJECTS E-23-604 AND E-23-612

The deformation and strain analysis for extrusion of cast billets at different temperatures and with different extrusion ratios is complete. The results of this analysis have been communicated to SRL and are being assembled into a report for publication. The results clearly show the influence of temperature on shearing during extrusion die, and the persistence of tensile transverse strains at different extrusion ratios.

The testing machine is now installed. The power supply has been connected to the machine and the system appears to be in order. Grips are still needed and should be ready shortly.

Strain and Deformation during Extrusion of Powder Metals

Quarterly Report

by

D.G. Berghaus

During the summer quarter, project efforts were directed to completion of strain analysis for extrusions of cast aluminum billets. Efforts were successful and resulted in complete strain distributions in the die vicinity for an extrusion ratio of 13:1. Complete distribution for extensional strains parallel and normal to the flow lines and for circumferential strain were determined. Values obtained satisfied various tests for accuracy. Accumulated shear values were also determined in axial planes through the die region.

A publication is being prepared.